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Imminent Epidemic of Diabetes Mellitus in Pakistan: Issues and Challenges for Health Care Providers

Waris Qidwai, Tabinda Ashfaq

Diabetes mellitus (DM) is a chronic metabolic disorder that has emerged as a great socioeconomic burden for the developing world. Over the past two decades there has been a significant rise in the prevalence of this devastating illness and is presenting as an alarming issue.¹

Currently DM affects 240 million people worldwide and this number is projected to increase substantially to 380 million by 2025, with 80% of burden in low and middle income countries². Pakistan belongs to high prevalence area, currently having 6.9 million affected people, with projected estimates expected to double by 2025 and affect 11.5 million people³. This alarming situation can have serious repercussions and presents as a challenge for Health Care Providers and health care policy makers in the country.

Diabetes is the fourth leading cause of death in most developed countries⁴, with Pakistan currently ranking at 7th position in the list of countries with major burden of DM and it is expected to move to 4th position⁵ if present situation continues.

The prevalence of both Type-1 and Type-2 Diabetes Mellitus is increasing worldwide but the prevalence of Type-2 is rising much more rapidly¹. The alarming increase of diabetes prevalence is projected to occur because of: population ageing, unhealthy diet, obesity, sedentary lifestyle and smoking⁶. According to a survey in Pakistan, prevalence of newly diagnosed diabetes was 5.1% in men and 6.8% in women in urban areas and 5.0% in men and 4.8% in women in rural areas. Impaired glucose tolerance in the urban versus the rural areas was 6.3% in men and 14.2% in women against 6.9% in men and 10.9% in women, respectively⁷.

In the past Type-2 diabetes was considered as a disease of ageing and the elderly but now this perception has turned out to be a complete misconception and people with this disease in developing countries including Pakistan are presenting at a younger age. The emergence of this pandemic at early age is attributable to rapid cultural changes and a high degree of urbanization leading people to adopt unhealthy lifestyles and decreased physical activity. Obesity along with sedentary life style and increase in caloric intake played a major role in recent explosion of this chronic illness⁸. Recent figures related to obesity in adolescent's show 6% of school children are obese while 19.35% are at risk for overweight with increase caloric intake and sedentary life style⁹.

Type-2 DM is one of the major causes of premature

illness and death worldwide due to cardiovascular death¹⁰. It is also ranked among the top causes for blindness and renal failure¹⁰. Poor glycemic control results in diabetic foot and amputation ultimately leading to dependency, depression, and enormous healthcare costs for virtually every society¹¹. The financial burden of this disease and its complications is increasing the overall health expenditures. The presentation of this chronic disease at younger age, extends the potential burden of therapy to an even younger age group and for an even longer period of time, thus further increasing financial burden on the patients and country.

The scarcity of health-care services and poor infrastructure for health care in Pakistan is an important factor in making it difficult to control the emerging epidemic of DM in the country. There are 139555 doctors and 12,897 health facilities in the country to cater for 170 million people and with 69313 nurses but none trained specifically in the field of diabetes. There are 5345 Basic Health Units located in the rural areas supposedly providing care for nearly 170 million people¹².

Despite alarming situation in the country very few specialized diabetes centers and diabetic foot clinics are available and usually not accessible to the majority. Nurses working in diabetic centre usually do not receive any special education for diabetes. Government has allocated very limited funds for health sector. All these circumstances have made health care expensive and beyond the reach of most people thus leading to growing incidence of the condition, with the rural areas being the most affected. Family physicians who encounter majority of patients with diabetes are not updated with recent management of diabetes and have insufficient time to counsel patients for life style modification and management¹³.

Diabetes epidemic in Pakistan is a major challenge for Health Care Providers. Our current health care system have increasing difficulty in meeting the chronic health care needs of patients with diabetes, and calls for collaborative efforts between diabetic patients, health-care professionals, and health-care policy makers. Educational programmes focusing on health issues, promoting a healthy lifestyle, dietary habits and exercise are urgently needed. Warnings about the hazards of diabetic complications should also be emphasized. Early diagnosis of DM reduces the risk of the serious complications, and initiating appropriate management of the condition will allow diabetic patients to live

longer, healthier lives. The aim of integrating diabetes into primary health care is to establish routine screening procedures for monitoring and control and detecting the common complications of diabetes. It is important that Family Physicians, the most important first healthcare contact for people with diabetes, are trained in screening and treatment. They can also offer preventive programs that stress on proper diet and exercise. More specialized diabetic clinics including foot care clinics should be established.

In rural areas, where the infrastructure simply does not exist, all basic health units should be provided with glucometers to test blood sugar, and training to ensure that they are used correctly. These efforts must be backed up by a vigorous public health education campaign. For remote areas, beyond the reach of the BHUs, mobile camps should be set up periodically. Diabetes medication including drugs and insulin with syringes at subsidized rates should be provided for those who cannot afford them at regular price.

Given the enormous challenge of DM epidemic in the coming years on one hand and the lack of resources on the other, it is mandatory to initiate proactive measure on urgent basis. A proper action plan based on appropriately collected data should be top priority for health planners and policy makers. Resources will have to be mobilized and a multipronged approach will have to be utilized. It is high time we act now before it is too late.

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